



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/555,040

11/21/2005

Susanne Emig

05-549-CIP

2756

34704 7590 08/07/2009

BACHMAN & LAPOINTE, P.C.
900 CHAPEL STREET
SUITE 1201
NEW HAVEN, CT 06510

EXAMINER

HELM, CARALYNNE E

ART UNIT

PAPER NUMBER

1615

MAIL DATE

DELIVERY MODE

08/07/2009

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/555,040	Applicant(s) EMIG ET AL.	
	Examiner CARALYNNE HELM	Art Unit 1615	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 29 April 2009.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 44-92 is/are pending in the application.
- 4a) Of the above claim(s) 51-57, 67-75, 77, 87 and 92 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 44-50, 58-66, 76, 78-86 and 88-91 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☒ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>10/27/05, 4/18/06</u> | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Election/Restrictions

Applicant's election without traverse of Group I and the species where in the polyvalent ester R is a branched hydrocarbon residue with 5 carbons, W=X=Y=Z: - C(O)O- R1=R2=R3=R4: linear long-chain hydrocarbon residue with 21 carbon (pentaerythritol tetrabehenate), the emulsifier is cetyl PEG/PPG-10/1 dimethicone, the volatile silicone is decamethyl cyclopentasiloxane and the solids are inorganic pigments in the reply filed on April 29, 2009 is acknowledged.

Claims 51-57, 67-75, 77, 87, and 92 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected invention and species, there being no allowable generic or linking claim.

Priority

Acknowledgment is made of applicant's claim for foreign priority based on applications filed in Germany on September 6, 2004, September 20, 2004, November 11 2004 and May 3, 2005. It is noted, however, that applicant has not filed a certified copy of the 20 2004 014 004.7, 20 2004 014 644.4, 20 2004 017 760.9, and 10 2005 020 583.6 applications as required by 35 U.S.C. 119(b).

Double Patenting

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the

Art Unit: 1615

unjustified or improper timewise extension of the “right to exclude” granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 44-50, 58, 60, 64-66, 76, and 88-91 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1, 10, 16, 22, 44-48 of copending Application No. 11/189255 in view of Kuo et al. (see below for citation). Although the conflicting claims are not identical, they are not patentably distinct from each other because both teach a water in oil emulsion with the same phase organization composed of a solids phase, pentaerythritol tetrabehenate, and cetyl PEG/PPG-10/1 dimethicone with the same cosmetic intended use and viscoelastic properties. These copending claims do not recite a particular solid. Kuo et al. teach various inorganic solids as known solids in a water-in-oil emulsion for cosmetic preparations (see paragraphs 29 and 30). Therefore, as a known option within the technical grasp of one of ordinary skill, it would have been obvious for this artisan to select an inorganic solid as the solid in the preparation of copending application

Art Unit: 1615

11/189255. Therefore claims 44-50, 58, 60, 64-66, 76, and 88-91 are obvious over claims 1, 10, 16, 22, 44-48 of copending Application No. 11/189255 in view of Kuo et al.

This is a provisional obviousness-type double patenting rejection.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

The four factual inquiries of *Graham v. John Deere Co.* have been fully considered and analyzed in the rejections that follow.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation

Art Unit: 1615

under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 44-50, 58-66, 76, 78-80, 86, and 88-91 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kouzuki et al. (US Patent No. 7,169,379) in view of Pantich (US Patent No. 5,635,165), and Kuo (US PGPub No. 2005/0249689) as evidenced by the Abil® EM 90 reference (2003).

Kouzuki et al. teach a sunscreen composition that is prepared by conventional means (see column 10 lines 29-30; instant claims 88-90). The composition is taught to contain polar oils where a pentaerythritol ester is envisioned (see column 5 lines 17-24). In one particular embodiment, the composition contains pentaerythritol tetraoctanoate at 4 wt%, decamethyl cyclopentasiloxane at 30 wt%, POE/methyl siloxane at 2 wt% (interpreted as a dimethyl polysiloxane), water, octyl methoxycinnamate, and zinc oxide at 20 wt% (see example 16; instant claims 44, 58-63, 76, 78-79, and 86). Kouzuki et al. teach the compositions are envisioned in emulsion and paste form (see column 4 lines 56-58). Kouzuki et al. do not explicitly teach pentaerythritol tetrabehenate or an emulsifier.

Pantich teaches personal care composition that include fatty acid esters that are also polar oils (see column 12 lines 28-29). Included in this set of oils known in skin

Art Unit: 1615

applications, are pentaerythritol tetraoctanoate and pentaerythritol tetrabehenate, as functional equivalents (see column 13 lines 23-27; instant claims 45-50).

Kuo et al. teach personal care compositions and particularly discuss sunscreens (see paragraph 2). Kuo et al. go on to teach that sunscreen forms are known by those of skill in the art and include water-in-oil emulsions (see paragraph 30). In addition, Kuo et al. teach emulsifiers envisioned for forming sunscreen emulsions and within this set is Abil EM90.

The Abil EM90 reference teaches that this emulsifier is known under the name cetyl PEG/PPG-10/1 dimethicone as a water-in-oil emulsifier (see page 1 and page 2 column 1; instant claims 64-66).

In light of the teachings of Pantich of functionally equivalent fatty acid esters, it would have been obvious to one of ordinary skill in the art to exchange pentaerythritol tetrabehenate for the pentaerythritol tetraoctanoate in the sunscreen embodiment taught by Kouzuki et al. In addition, since emulsion forms were taught for sunscreen compositions by both of Kouzuki et al. and Kuo et al., it would have been obvious to one of ordinary skill at the time of the invention to formulate a water-in-oil emulsion for the components taught by Kouzuki et al. where the cetyl PEG/PPG-10/1 dimethicone emulsifier of Kuo et al. is included to yield a stable, appropriately oriented phase construction. Routine optimization that would have been obvious to one of ordinary skill in the art would have achieved the claimed proportions. According to MPEP 2112.01, "A chemical composition and its properties are inseparable. Therefore, if the prior art teaches the identical chemical structure, the properties applicant discloses and/or

Art Unit: 1615

claims are necessarily present.” This treatment results from *In re Spada*, which states that, “Products of identical chemical composition can not have mutually exclusive properties.” *In re Spada*, 911 F.2d 705, 709, 15 USPQ2d 1655, 1658 (Fed. Cir. 1990). Since all the claimed components would have been present in the claimed arrangement in the composition based upon the combined references, and absent evidence to the contrary, the composition would also have the same claimed viscoelastic properties (see instant claim 91). Therefore claims 44-50, 58-66, 76, 78-80, 86, and 88-91 are obvious over Kouzuki et al. in view of Pantich, and Kuo as evidenced by the Abil® EM 90 reference.

Claims 44, 76, and 81-83 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kouzuki et al. in view of Pantich, and Kuo as evidenced by the Abil® EM 90 reference as applied to claims 44-50, 58-66, 76, 78-80, 86, and 88-91 above, and further in view of Katsuyama et al. (US Patent No.6,171,580).

Kouzuki et al. in view of Pantich, and Kuo as evidenced by the Abil® EM 90 reference make obvious the composition of claim 44 with zinc oxide at 20 wt% and additional sunscreen actives (see instant claims 44, 76, and 82). This modified reference does not explicitly teach the size of the zinc oxide particles.

Katsuyama et al. teach ultraviolet-screening zinc oxide particles (see abstract). Specifically, Katsuyama et al. teach the size of zinc oxide particles for sunscreen purposes is 50 nm to 100 nm (see column 2 lines 12-23; instant claim 81). In addition,

Art Unit: 1615

they teach that the particles can perform their intended screening function when incorporated at 10 wt% into a topical composition (see example 4; instant claim 83).

In view of these teachings of Katsuyama et al., it would have been obvious to one of ordinary skill in the art at the time of the invention to use their zinc oxide particles as the zinc oxide particles in Kouzuki et al. in view of Pantich, and Kuo as evidenced by the Abil® EM 90 reference at 50 nm. Therefore claims 44, 76, and 81-83 are obvious over Kouzuki et al. in view of Pantich, Kuo, and Katsuyama et al. as evidenced by the Abil® EM 90 reference.

Claims 44, 76, 81, and 84-85 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kouzuki et al. in view of Pantich, Kuo, and Katsuyama et al. as evidenced by the Abil® EM 90 reference as applied to claims 44, 76, and 81-83 above, and further in view of Wendel et al. (US PGPub No. 2004/0258638).

Kouzuki et al. in view of Pantich, Kuo, and Katsuyama et al. as evidenced by the Abil® EM 90 reference make obvious the composition of claim 44 with zinc oxide nanopigment and additional sunscreen actives (see instant claims 44, 76, and 81). Although Kouzuki et al. recite an addition sunscreen agent (octyl methoxycinnamate) as a component of their compositions, this modified reference does not explicitly teach both 3-methylbenzydiene camphor and isoamyl p-methoxycinnamate as being present in the composition.

Wendel et al. teach compositions with combinations of ultraviolet light filters where zinc oxide particulates less than 300 nm are envisioned (see paragraphs 31-32).

Art Unit: 1615

Additional UV filters are also taught that include 3-(4-methylbenzydiene) camphor and isoamyl p-methoxycinnamate (see paragraphs 80 and 92; instant claims 84-85).

“It is *prima facie* obvious to combine two compositions each of which is taught by the prior art to be useful for the same purpose, in order to form a third composition to be used for the very same purpose.... [T]he idea of combining them flows logically from their having been individually taught in the prior art.” *In re Kerkhoven*, 626 F.2d 846, 850, 205 USPQ 1069, 1072 (CCPA 1980) see MPEP 2144.06. Therefore since zinc oxide nanopigment, 3-(4-methylbenzydiene) camphor, and isoamyl p-methoxycinnamate are all known as UV filters, it would have been obvious to one of ordinary skill at the time of the invention include all three of them as the sunscreen agents in the composition of Kouzuki et al. in view of Pantich, Kuo, and Katsuyama et al. as evidenced by the Abil® EM 90 reference. Therefore claims 44, 76, 81, and 84-85 are obvious over Kouzuki et al. in view of Pantich, Kuo, Katsuyama et al., and Wendel et al. as evidenced by the Abil® EM 90 reference.

Conclusion

No claim is allowed.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to CARALYNNE HELM whose telephone number is (571)270-3506. The examiner can normally be reached on Monday through Thursday 8-5 (EDT).

Art Unit: 1615

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Woodward can be reached on 571-272-8373. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Caralynne Helm/
Examiner, Art Unit 1615

/Tracy Vivlemore/
Primary Examiner, Art Unit 1635